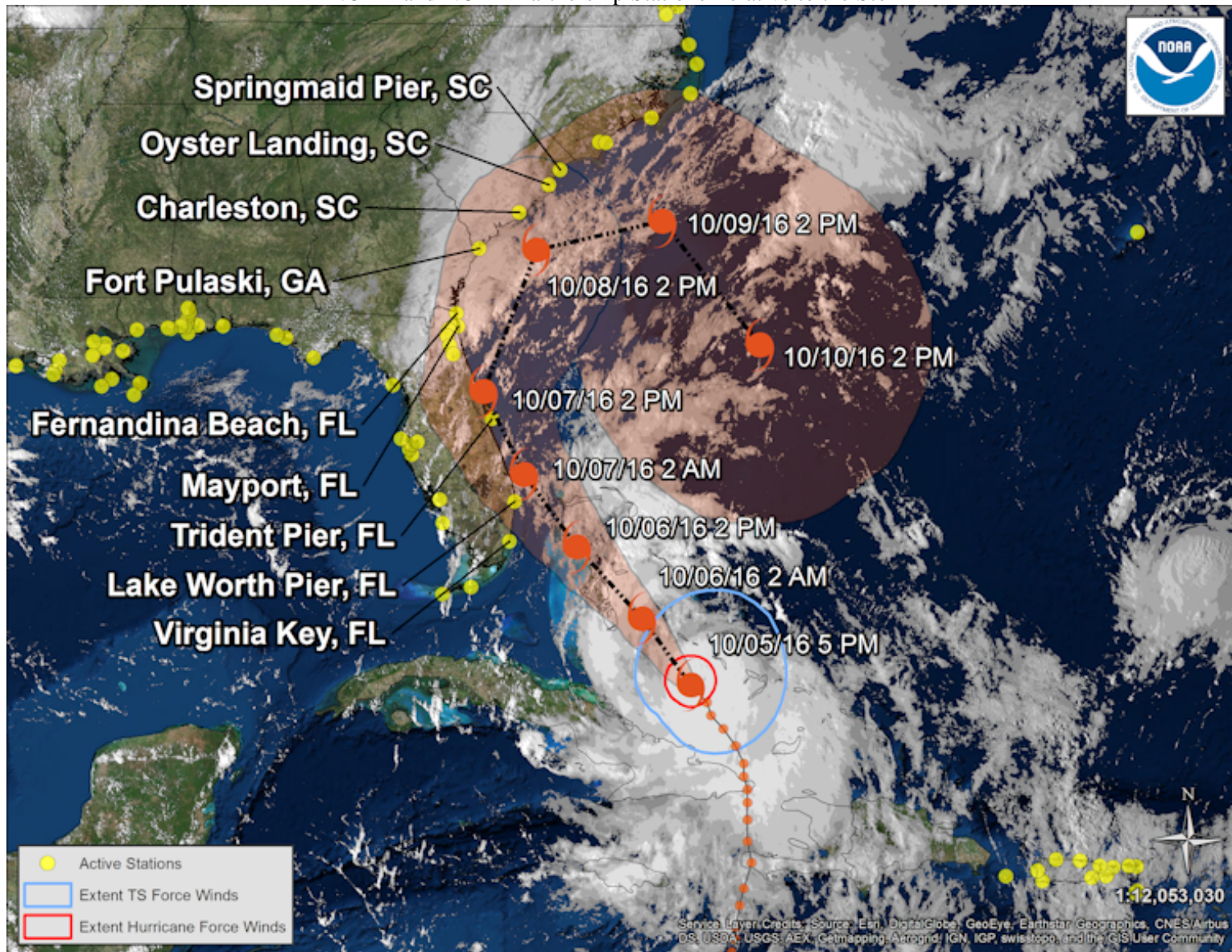




Hurricane MATTHEW QuickLook Posted: 18:00 EDT 10/05/2016

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 10/05/2016 18:00 EDT, water levels along the coast from southern Florida to South Carolina are slightly elevated and range between 0.3 and 1.3 ft above normal tide levels. Winds are currently measuring between 10 and 20 kts with slightly higher gusts. Barometric pressure is generally steady across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: KLO

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:000
WTNT34 KNHC 052038
TCPAT4

BULLETIN
HURRICANE MATTHEW ADVISORY NUMBER 31
NWS NATIONAL HURRICANE CENTER MIAMI FL AL142016
500 PM EDT WED OCT 05 2016

...SEVERE HURRICANE MATTHEW ON ITS WAY TO THE BAHAMAS AND FLORIDA...

WATCHES AND WARNINGS

----- CHANGES WITH THIS ADVISORY:

The Hurricane Watch has been extended northward from Fernandina Beach to Savannah River.

A Tropical Storm Watch has been issued for the Florida Gulf Coast from north of Chokoloskee to Suwannee River.

The Government of Cuba has discontinued the Hurricane Watches and Warnings for Cuba.

The Tropical Storm Warning for Haiti has been discontinued.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

- * Southeastern Bahamas, including the Inaguas, Mayaguana, Acklins, Crooked Island, Long Cay, and Ragged Island
- * Central Bahamas, including Long Island, Exuma, Rum Cay, San Salvador, and Cat Island
- * Northwestern Bahamas, including the Abacos, Andros Island, Berry Islands, Bimini, Eleuthera, Grand Bahama Island, and New Providence
- * North of Golden Beach to the Flagler/Volusia county line
- * Lake Okeechobee

A Hurricane Watch is in effect for...

- * North of the Flagler/Volusia county line to Savannah River

A Tropical Storm Warning is in effect for...

- * Chokoloskee to Golden Beach
- * Florida Keys from Seven Mile Bridge eastward
- * Florida Bay

A Tropical Storm Watch is in effect for...

* North of Chokoloskee to Suwannee River

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

Interests elsewhere in the Florida Peninsula, the Florida Keys, and in the Carolinas should monitor the progress of Matthew.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 500 PM EDT, the eye of Hurricane Matthew was located near 22.5N 75.7W. Matthew is moving toward the northwest near 12 mph, and this motion is expected to continue during the next 24 to 48 hours. On this track, Matthew will be moving across the Bahamas tonight and tomorrow, and is expected to be very near the east coast of Florida by tomorrow night.

Some strengthening is forecast during the next couple of days, and Matthew is expected to remain at category 3 or stronger while it moves through the Bahamas and approaches the east coast of Florida.

Hurricane-force winds extend outward up to 45 miles from the center and tropical-storm-force winds extend outward up to 175 miles. Ragged Island in the Bahamas recently reported sustained winds of 58 mph, and a minimum pressure of 985 mb.

The estimated minimum central pressure is 963 mb.

HAZARDS AFFECTING LAND

WIND: Hurricane conditions will continue over the central Bahamas and spread into the northwestern Bahamas tonight and Thursday. Winds will gradually diminish over the southeastern Bahamas tonight.

Hurricane conditions are expected to first reach the hurricane warning area in Florida by late Thursday and will spread northward Thursday night and Friday. Tropical storm conditions are first expected in Florida by early Thursday.

Hurricane conditions are possible in the hurricane watch area in Florida and Georgia by late Friday, with tropical storm conditions possible on Friday.

Tropical storm conditions are possible in the tropical storm watch area on the Florida Gulf Coast on Thursday.

Wind gusts to tropical storm force are still possible along the north coast of central and eastern Cuba through this evening.

RAINFALL: Matthew is expected to produce total rainfall amounts in the following areas:

Eastern Cuba...8 to 12 inches, isolated 20 inches

Central Cuba...3 to 5 inches, isolated 8 inches

Western Haiti...additional 2 to 4 inches, isolated storm totals of 40 inches

The Bahamas...8 to 12 inches, isolated 15 inches

Turks and Caicos Islands...2 to 5 inches, isolated 8 inches

Northeastern Haiti and the Northern Dominican Republic...1 to 3 inches, isolated 5 inches

Coastal eastern Florida...4 to 7 inches, isolated 10 inches

Florida Keys....1 to 3 inches, isolated 5 inches

Life-threatening flash floods and mudslides are likely in southern and northwestern Haiti and central and eastern Cuba.

Rainfall will diminish across Jamaica and the Dominican Republic this evening.

STORM SURGE: The combination of a dangerous storm surge and large and destructive waves could raise water levels by as much as the following amounts above normal tide levels...

Northern Coast of Cuba east of Camaguey...4 to 6 feet

The Bahamas...10 to 15 feet

The water could reach the following heights above ground if the peak surge occurs at the time of high tide...

Sebastian Inlet to Savannah River...5 to 8 ft

Deerfield Beach to Sebastian Inlet...3 to 5 ft

Virginia Key to Deerfield Beach...1 to 2 ft

Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. Large waves generated by Matthew will cause water rises to occur well in advance of and well away from the track of the center.

The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. There is a danger of life-threatening inundation during the next 36 hours along the Florida east coast from Deerfield Beach to the Flagler/Volusia county line.

There is the possibility of life-threatening inundation during the next 48 hours from north of the Flagler/Volusia county line to Savannah River. For a depiction of areas at risk, please see the Prototype National Weather Service Storm Surge Watch/Warning Graphic. For information specific to your area, please see products issued by your local National Weather Service forecast office.

The Prototype Storm Surge Watch/Warning Graphic is a depiction of areas that would qualify for inclusion under a storm surge watch or warning currently under development by the National Weather Service and planned for operational use in 2017. The Prototype Graphic is available at hurricanes.gov.

SURF: Swells generated by Matthew will continue to affect portions of the north coast of Cuba and the Bahamas during the next few days, and will spread northward along the east coast of Florida and the

southeast U.S. coast tonight and Thursday and continue into the weekend. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

Next intermediate advisory at 800 PM EDT.

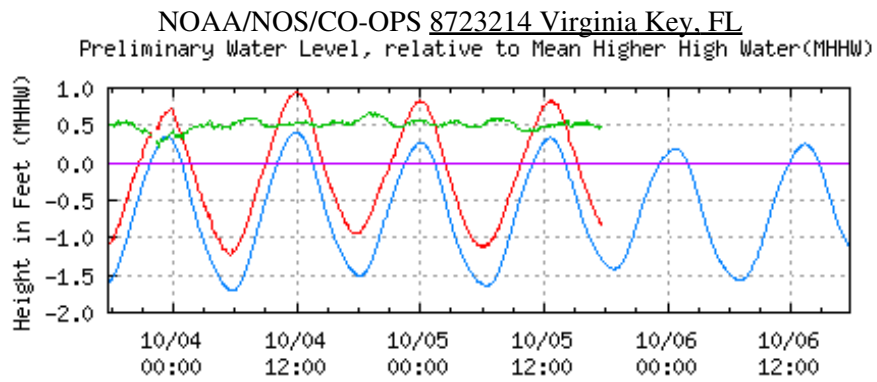
Next complete advisory at 1100 PM EDT.

\$\$

Forecaster Avila

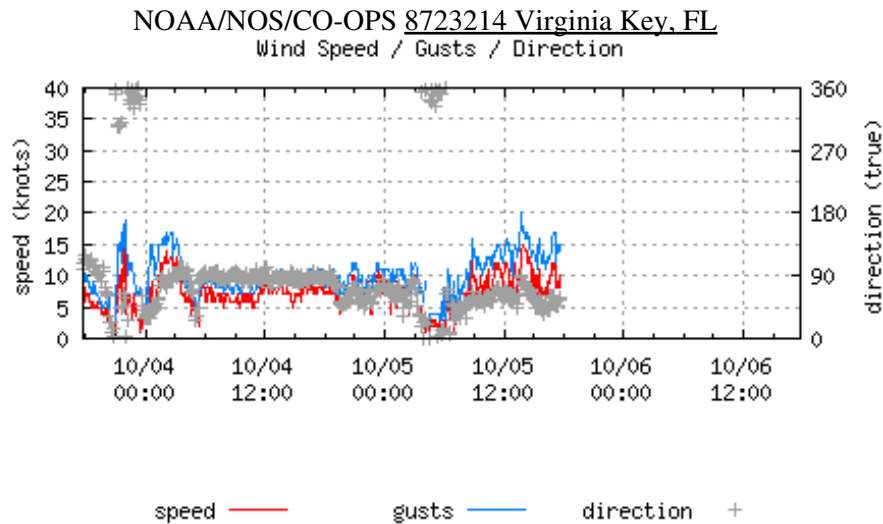
For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Virginia Key - Water Level](#), [Virginia Key - Winds](#), [Virginia Key - Barometric](#), [Lake Worth Pier - Water Level](#), [Lake Worth Pier - Winds](#), [Trident Pier - Water Level](#), [Trident Pier - Winds](#), [Trident Pier - Barometric](#), [Mayport \(Bar Pilots Dock\) - Water Level](#), [Mayport \(Bar Pilots Dock\) - Winds](#), [Fernandina Beach - Water Level](#), [Fernandina Beach - Winds](#), [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Oyster Landing \(N Inlet Estuary\) - Water Level](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#)



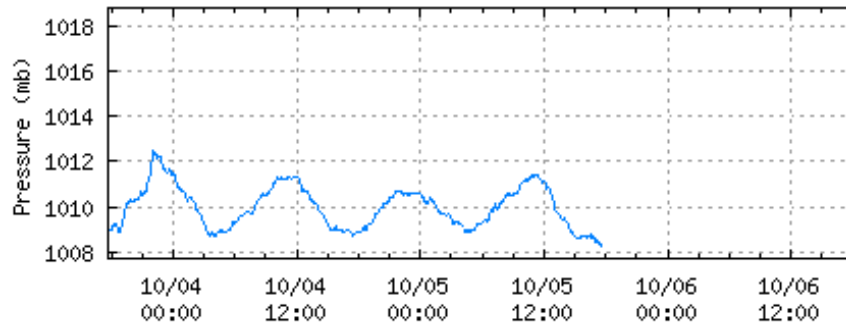
Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/05/2016 17:42 (EDT). Data relative to MHHW
Observed: -0.85 ft. Predicted: -1.31 ft. Residual: 0.46 ft.
 Historical Maximum Water Level: Oct 24 2005, 2.58 ft.
 Next High Tide: 10/06/2016 00:44 (EDT), 0.19 ft.



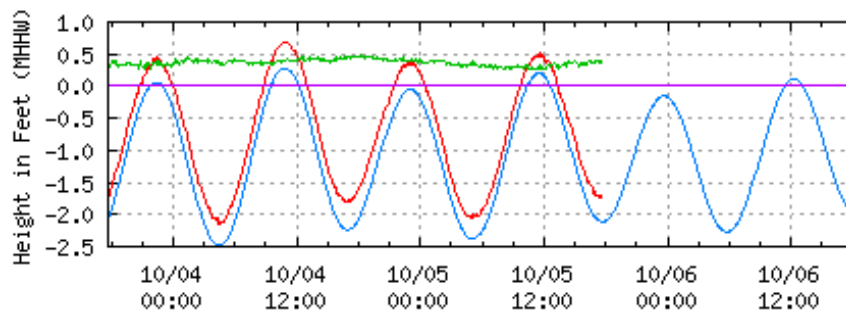
Last Observed Sample: 10/05/2016 17:42 (EDT)
Wind Speed: 9 knots Gusts: 12 knots Direction: 60° T

NOAA/NOS/CO-OPS 8723214 Virginia Key, FL
Barometric Pressure



barometric pressure —
Last Observed Sample: 10/05/2016 17:42 (EDT)
Barometric Pressure: 1008.1 mb

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)

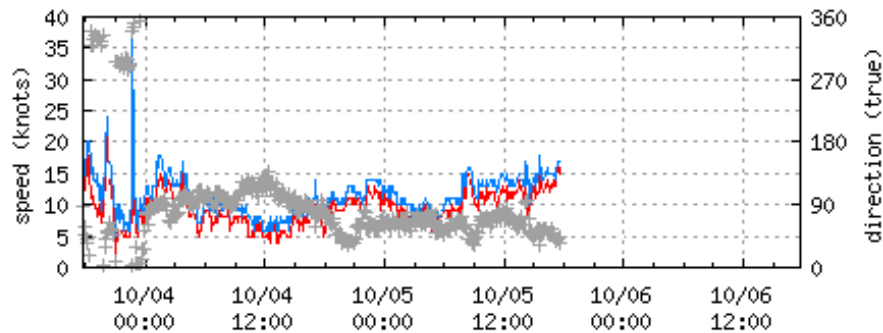


Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/05/2016 17:36 (EDT). Data relative to MHHW
Observed: -1.71 ft. Predicted: -2.11 ft. Residual: 0.40 ft.
Historical Maximum Water Level: Nov 23 1984, 1.88 ft.
Next High Tide: 10/05/2016 23:40 (EDT), -0.16 ft.

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, FL

Wind Speed / Gusts / Direction



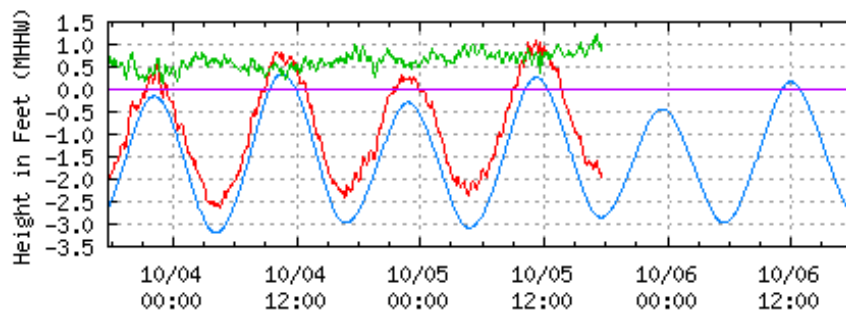
speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:36 (EDT)

Wind Speed: 16 knots Gusts: 17 knots Direction: 43° T

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —
Observed WL —

(Obs-Pred) —
MHHW —

Last Observed Sample: 10/05/2016 17:36 (EDT). Data relative to MHHW

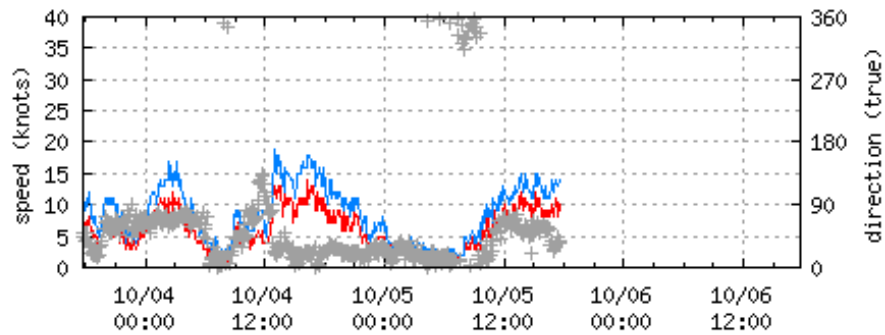
Observed: -1.87 ft. Predicted: -2.85 ft. Residual: 0.98 ft.

Historical Maximum Water Level: Sep 26 2004, 4.01 ft.

Next High Tide: 10/05/2016 23:28 (EDT), -0.43 ft.

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL

Wind Speed / Gusts / Direction



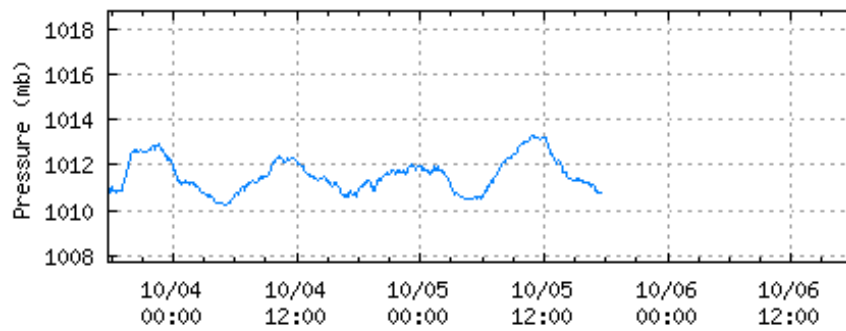
speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:36 (EDT)

Wind Speed: 9 knots Gusts: 14 knots Direction: 37° T

NOAA/NOS/CO-OPS 8721604 Trident Pier, FL

Barometric Pressure

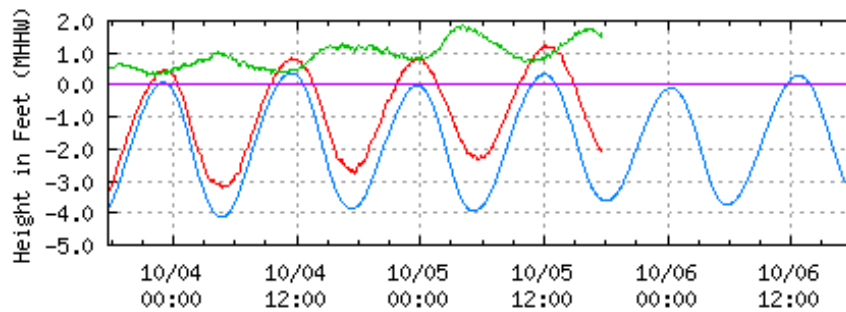


barometric pressure —

Last Observed Sample: 10/05/2016 17:36 (EDT)

Barometric Pressure: 1010.8 mb

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

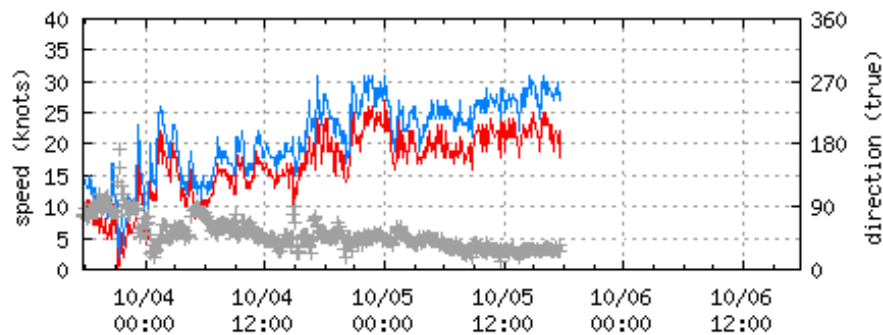
Last Observed Sample: 10/05/2016 17:36 (EDT). Data relative to MHHW

Observed: -1.99 ft. Predicted: -3.58 ft. Residual: 1.59 ft.

Historical Maximum Water Level: Sep 27 2004, 2.47 ft.

Next High Tide: 10/06/2016 00:20 (EDT), -0.09 ft.

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL
Wind Speed / Gusts / Direction

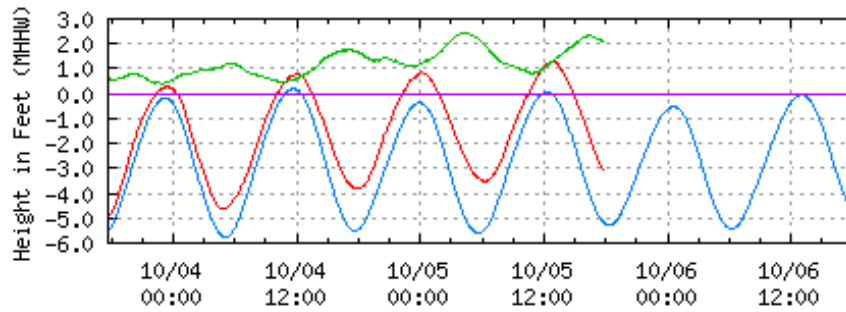


speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:36 (EDT)

Wind Speed: 18 knots Gusts: 27 knots Direction: 34° T

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

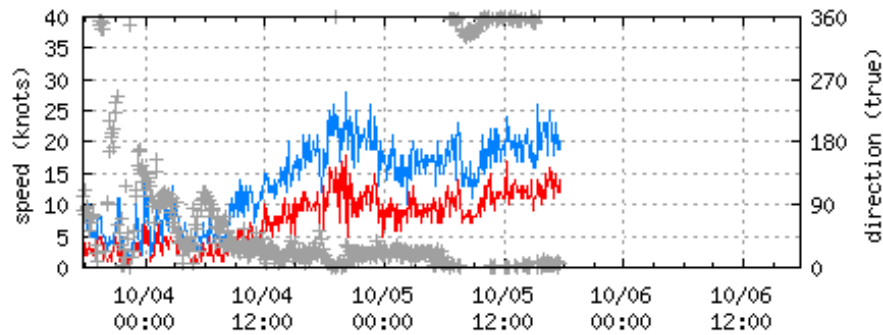
Last Observed Sample: 10/05/2016 17:42 (EDT). Data relative to MHHW

Observed: -3.03 ft. Predicted: -5.14 ft. Residual: 2.11 ft.

Historical Maximum Water Level: Oct 2 1898, 6.94 ft.

Next High Tide: 10/06/2016 00:34 (EDT), -0.54 ft.

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL
Wind Speed / Gusts / Direction

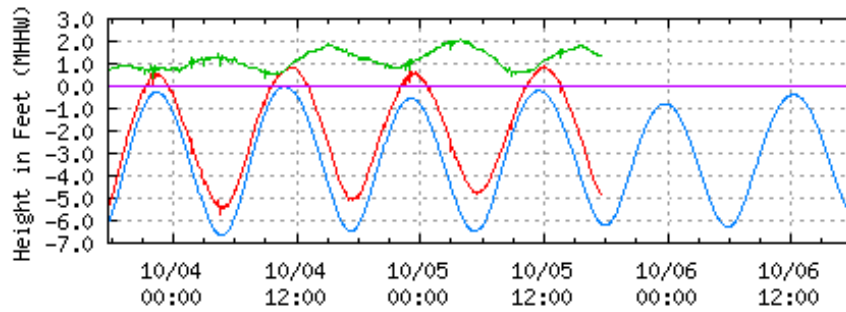


speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:42 (EDT)

Wind Speed: 12 knots Gusts: 20 knots Direction: 7° T

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

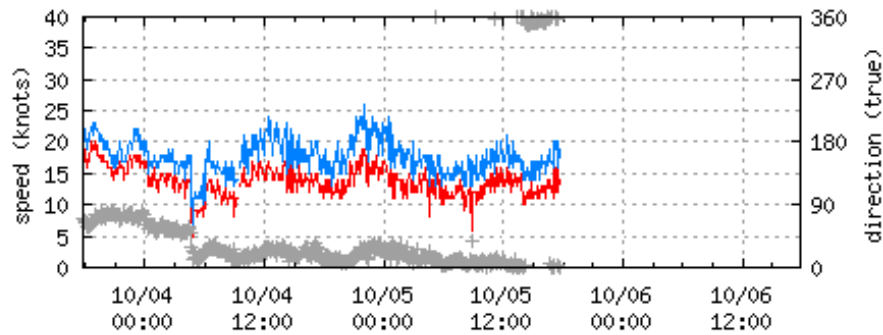
Last Observed Sample: 10/05/2016 17:36 (EDT). Data relative to MHHW

Observed: -4.86 ft. Predicted: -6.17 ft. Residual: 1.31 ft.

Historical Maximum Water Level: Oct 15 1947, 3.40 ft.

Next High Tide: 10/05/2016 23:47 (EDT), -0.79 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA
Wind Speed / Gusts / Direction

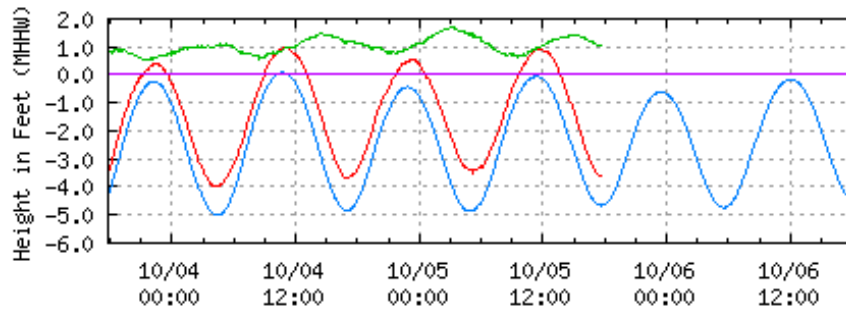


speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:36 (EDT)

Wind Speed: 14 knots Gusts: 19 knots Direction: 0° T

NOAA/NOS/CO-OPS 8665530 Charleston, SC
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

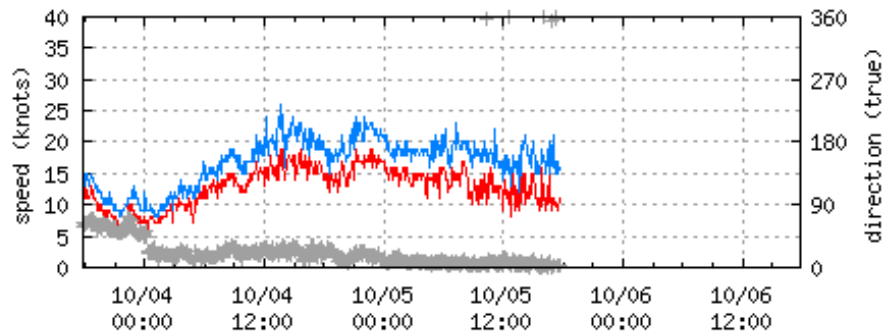
Last Observed Sample: 10/05/2016 17:36 (EDT). Data relative to MHHW

Observed: -3.57 ft. Predicted: -4.65 ft. Residual: 1.08 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 10/05/2016 23:28 (EDT), -0.62 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, SC
Wind Speed / Gusts / Direction

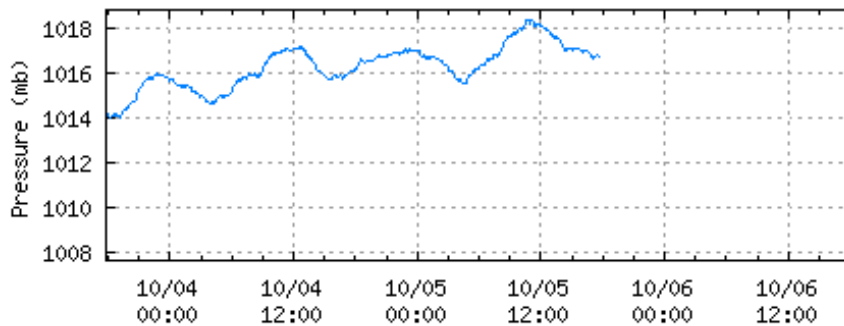


speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:36 (EDT)

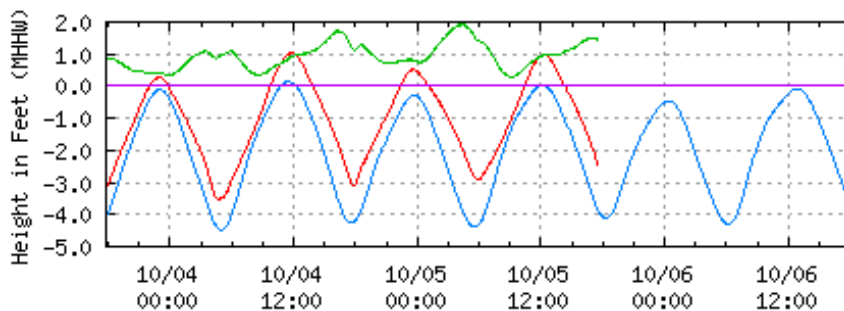
Wind Speed: 11 knots Gusts: 16 knots Direction: 2° T

NOAA/NOS/CO-OPS 8665530 Charleston, SC
Barometric Pressure



barometric pressure —
Last Observed Sample: 10/05/2016 17:36 (EDT)
Barometric Pressure: 1016.7 mb

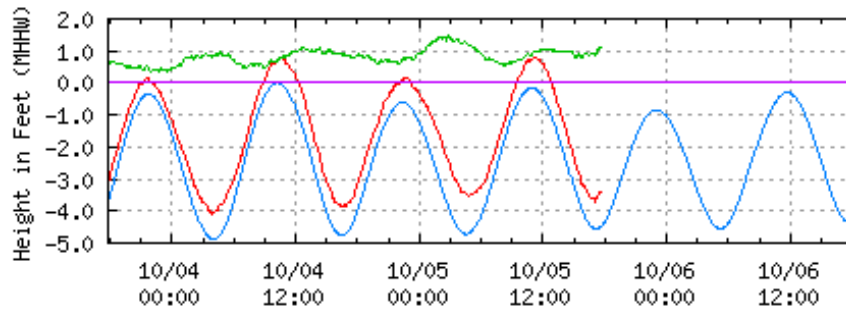
NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 10/05/2016 17:30 (EDT). Data relative to MHHW
Observed: -2.43 ft. Predicted: -3.85 ft. Residual: 1.42 ft.
Historical Maximum Water Level: Aug 26 2011, 2.40 ft.
Next High Tide: 10/06/2016 00:24 (EDT), -0.46 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —
Observed WL — MHHW —

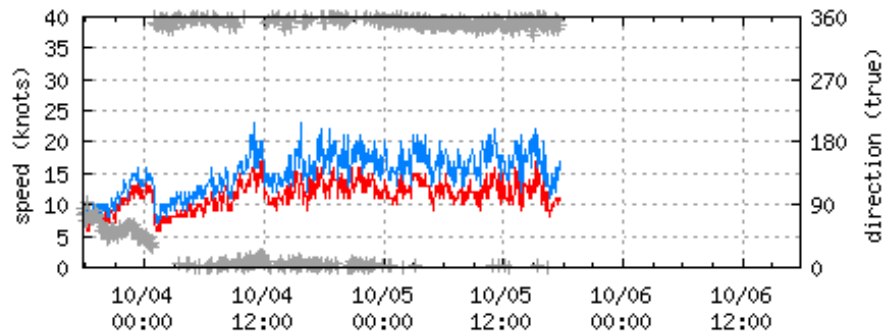
Last Observed Sample: 10/05/2016 17:36 (EDT). Data relative to MHHW

Observed: -3.40 ft. Predicted: -4.50 ft. Residual: 1.10 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft.

Next High Tide: 10/05/2016 23:02 (EDT), -0.84 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC
Wind Speed / Gusts / Direction



speed — gusts — direction +

Last Observed Sample: 10/05/2016 17:36 (EDT)

Wind Speed: 11 knots Gusts: 17 knots Direction: 348° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8723214	Virginia Key, FL	10/05/2016 17:42 (EDT)	-0.85 ft	-1.31 ft	0.46 ft	0.83 ft
8722670	Lake Worth Pier, FL	10/05/2016 17:36 (EDT)	-1.71 ft	-2.11 ft	0.40 ft	0.53 ft
8721604	Trident Pier, FL	10/05/2016 17:36 (EDT)	-1.87 ft	-2.85 ft	0.98 ft	1.11 ft
8720218	Mayport (Bar Pilots Dock), FL	10/05/2016 17:36 (EDT)	-1.99 ft	-3.58 ft	1.59 ft	1.22 ft
8720030	Fernandina Beach, FL	10/05/2016 17:42 (EDT)	-3.03 ft	-5.14 ft	2.11 ft	1.26 ft
8670870	Fort Pulaski, GA	10/05/2016 17:36 (EDT)	-4.86 ft	-6.17 ft	1.31 ft	0.87 ft
8665530	Charleston, SC	10/05/2016 17:36 (EDT)	-3.57 ft	-4.65 ft	1.08 ft	0.92 ft
8662245	Oyster Landing (N Inlet Estuary), SC	10/05/2016 17:30 (EDT)	-2.43 ft	-3.85 ft	1.42 ft	0.99 ft
8661070	Springmaid Pier, SC	10/05/2016 17:36 (EDT)	-3.40 ft	-4.50 ft	1.10 ft	0.81 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce